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Stryker Fleet Management (AUSA)



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PM, Fleet Management

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Distribution Statement A: Approved for public release; distribution is unlimited.



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Product Manager, Fleet Management



NBC Recon Vehicle (NBCRV)

MISSION EQUIPMENT:

JBPDs, JSLSCAD, CBMS, CVSS



Anti Tank Guided Missile (ATGM)

MISSION EQUIPMENT:

ETS, TML, MITAS, Card Rack Assembly



Recon Vehicle (RV)

MISSION EQUIPMENT:

LRAS3



Infantry Carrier Vehicle (ICV)

MISSION EQUIPMENT:

CAT C7 Engine, Allison 3200SP Transmission,
Drivetrain, RWS, SINCGARS / FBCB2 /
EPLRS / DAGR / Intercom System



Medical Evacuation Vehicle (MEV)

MISSION EQUIPMENT:

Litter Lift



Mortar Carrier (MCV)

MISSION EQUIPMENT:

RMS6L 120mm Mortar
System, MFCS



Commander's Vehicle (CV)

MISSION EQUIPMENT:

NTDR, SATCOM w/ SOTM,
HF Radio, FH MUX



Fire Support Vehicle (FSV)

MISSION EQUIPMENT:

LRAS3, FS3, INU



Engineer Squad Vehicle (ESV)

MISSION EQUIPMENT:

AMP, SOB, SMP,
MR, LMS, MSD

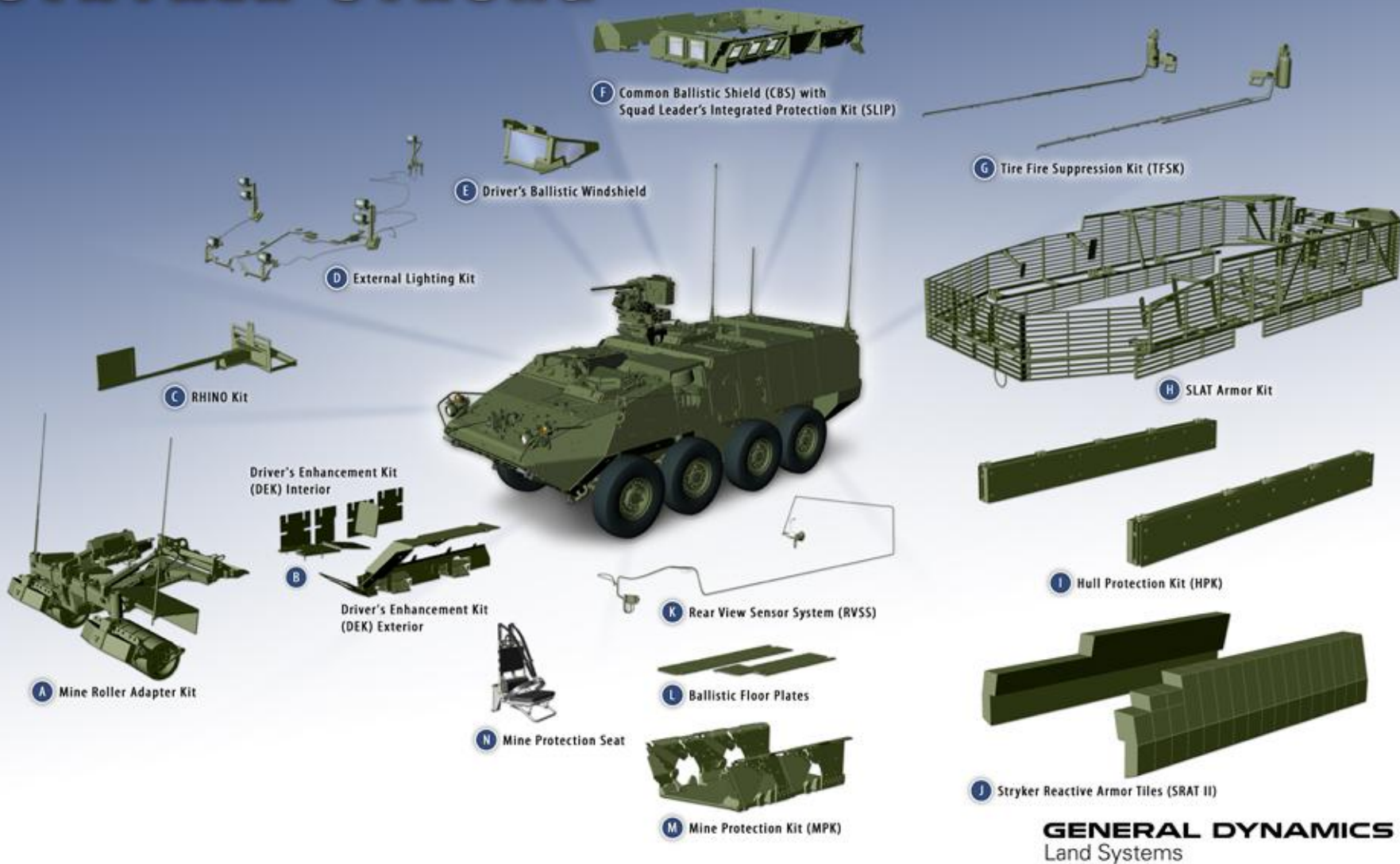


Mobile Gun System (MGS)

MISSION EQUIPMENT:

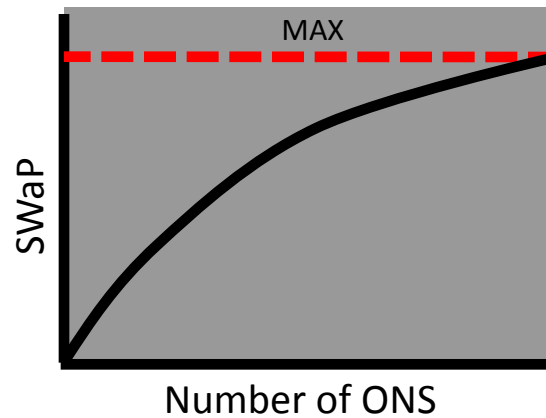
M68A2 105mm Cannon,
Ammunition Handling System,
(Replenisher/Carousel/Rammer Assembly)
Dual Axis Stabilized Fire Control

STRYKER STRONG





Space, Weight, and Power



- Requirements have grown vehicle weight, and placed increased claims on space and power.
- C-130 Transportability is a Stryker KPP which requires that we are continuously focused on SWaP issues.



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The Stryker Future Improvements List (1 - n List)

Stryker FOV

Stryker Individual Variants

Stryker Consolidated 1-n list

1
2
3
4
5
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ICV	RV	CV	ESV	MEV	NBCRV	ATGM	MC	MGS	FSV
1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5
n	n	n	n	n	n	n	n	n	n
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Inputs:

- ORD / CDD
- OIF / ONS
- RDTE / OPA

Considerations:

- Type of \$\$\$
- MEP Trade Offs for FOV
- Technology Bundling
- New Priority vs. Existing 1-n

Stryker Family of Vehicles Survivability Technologies

■ Armor Technologies

- Composite/Ceramic Armors – Lightweight armors to defeat EFPs and medium KE threats.
- Reactive Appliques – Explosive add-on armors to defeat RPGs and EFPs.

■ Armor Materials

- Ceramics – Develop alternate lower cost ceramic materials.
- High Hardness Steel - Improve surge capacity.

■ Active Protection Systems

- Develop low cost technologies for application to light armored vehicles.



Stryker Family of Vehicles

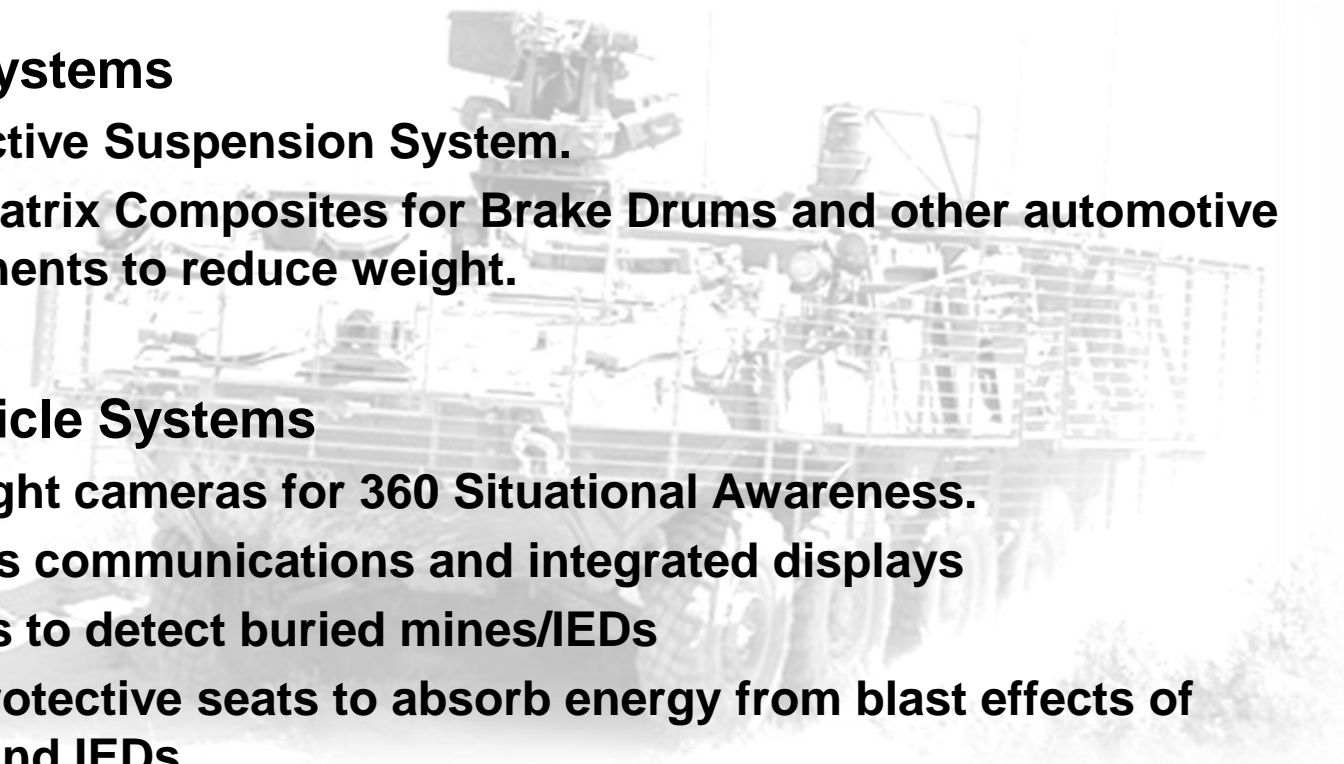
Vehicle Technologies

■ Mobility Systems

- Semi-active Suspension System.
- Metal Matrix Composites for Brake Drums and other automotive components to reduce weight.

■ Other Vehicle Systems

- Day /Night cameras for 360 Situational Awareness.
- Wireless communications and integrated displays
- Sensors to detect buried mines/IEDs
- Blast protective seats to absorb energy from blast effects of mines and IEDs.
- Improve / extend Silent Watch capability





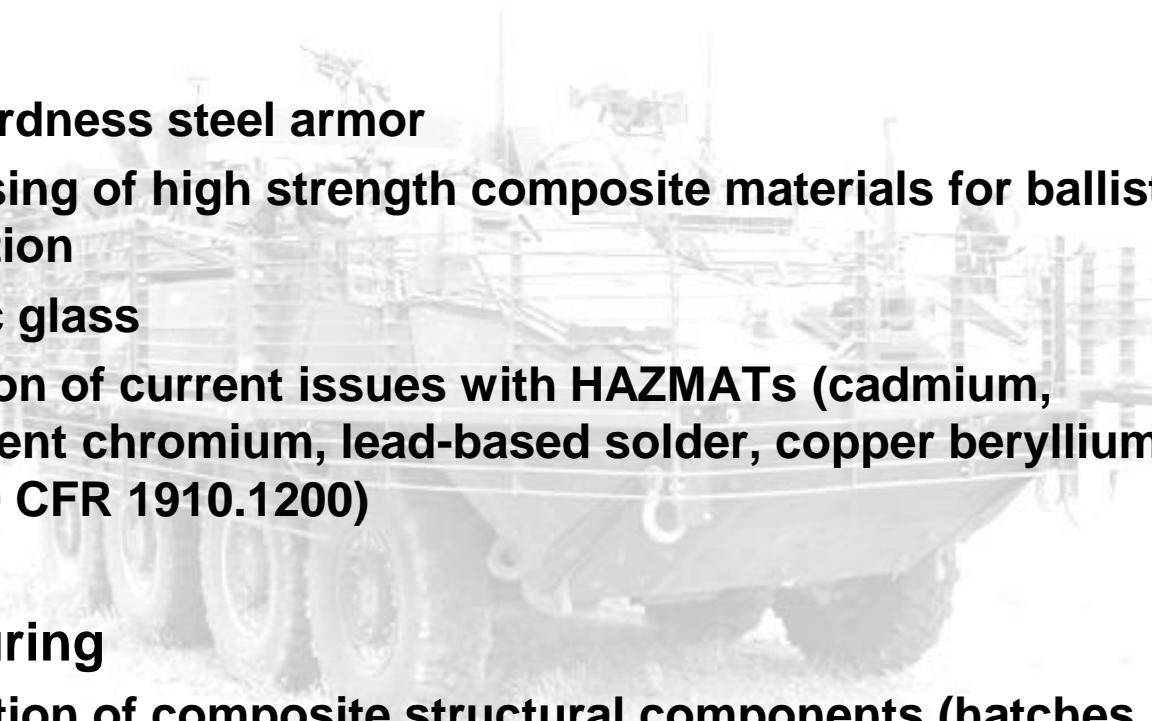
Stryker Family of Vehicles Manufacturing Capabilities

■ Materials

- High hardness steel armor
- Processing of high strength composite materials for ballistic application
- Ballistic glass
- Mitigation of current issues with HAZMATs (cadmium, hexavalent chromium, lead-based solder, copper beryllium, etc.) (29 CFR 1910.1200)

■ Manufacturing

- Fabrication of composite structural components (hatches, etc.)
- Low heat generating processes for welding armor steel.





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C4ISR Integration/CIO Opportunities



- **Faster Computing**
- **Improved Data Security (EG: Solutions for Multiple Levels of Security Projected on Same Display)**
- **Uplink/Downlink Speed Increase**
- **Line Replaceable Unit Consolidation**
- **Antenna Technology**
- **Communications Beyond Line of Site (BLOS) Technology/Wide Band On The Move**
- **Video Recording/Event Capture and Storage**
- **Cloud Computing**
- **Advanced Collaborative Environment Tool Kits**





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Stryker Family of Vehicles

Recent & Current Efforts

- Suspension / driveline upgrades
- Dismountable 120mm mortar
- Nitrogen gauge (MC)
- Hydraulic pullback tool (MC)
- RWS improvements
 - M240, M249 capability
 - ammo can
 - protective lens covers
- Rear/360 degree view
- 570 Amp Alternator
- Removable firing pin (MC)
- Tires





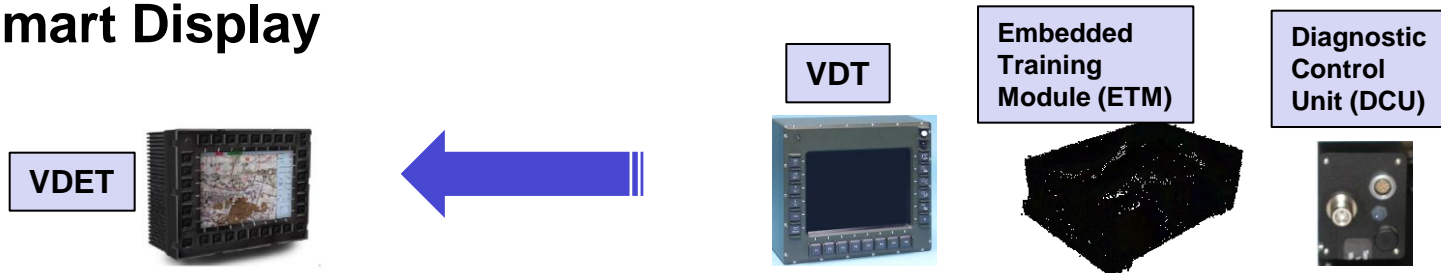
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C4ISR Integration/CIO

Recent & Current Integration Efforts

- Visual Display Electronic Terminal (Combining three LRUs) – Smart Display



- Continuous Band Antenna Performance Testing
- Single Loader Verifier – Intra – vehicle Software Downloading Device – one download/multiple programs/multiple LRUs
- Joint Platform Tablet for SA/C2 (partnership with PM FBCB2)



- Platform Encryption Device (PED) (partnership with PM FBCB2)



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Mission Equipment Acronyms



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Acronyms



ICV (Acronyms)

RWS – Remote Weapon Station

SINCGARS – Single Channel Ground and Airborne Radio System

FBCB2 – Future Battle command Brigade and Below

EPLRS – Enhanced Position Location Radio System

DAGR – Defense Advanced GPS Receiver

NBCRV (Acronyms)

JBPDS – Joint Biological Point Detection System

JSLSCAD – Joint Services Lightweight Stand-off Chemical Agent Detector

CBMS – Chemical, Biological Mass Spectrometer

CVSS – Chemical Vapor Sampling System

ATGM (Acronyms)

ETS – Elevated TOW System

TML – TOW Missile Launcher

MITAS – Modified Improved TOW Acquisition System



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Acronyms



ESV (Acronyms)

AMP – Angled Mine Plow

SOB – Straight Obstacle Blade

SMP – Surface Mine Plow

MR – Mine Roller

LMS – Lane Marking System

MSD – Magnetic Signature Duplicator

FSV (Acronyms)

LRAS3 – Long Range Advance Scout Surveillance System

FS3 – Fire Support Sensor System

INU – Initial Navigation Unit

CV (Acronyms)

NTDR – Near Term Digital Radio

SATCOM w/ SOTM – Satellite Communication with Satellite On the Move

HF Radio – High Frequency Radio

FH MUX – Frequency Hopping Multi Plexer



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Acronyms



MC (Acronyms)

MFCS – Mortar Fire Control System

RV (Acronyms)

LRAS3 – Long Range Advance Scout Surveillance System